

# EM Corporate QA Performance Metrics

## Quality Program Criteria Summary

Site: \_\_\_\_\_

Period: FY09

Critical Decision				10 CFR 830.122		Score	
1	2	3	4	Criterion		Previous Period	Current Period
				Management	1. Program		
					2. Personnel Training and Qualification		
					3. Quality Improvement		
					4. Documents and Records		
				Performance	5. Work Processes		
					6. Design		
					7. Procurement		
					8. Inspection & Acceptance Testing		
				Assessment	9. Management Assessment		
					10. Independent Assessment		
				Supplementals	Suspect /Counterfeit Items		
					Software QA		
					Corrective Action		

Performance Score



Excellent

1



Good



Investigate



Define Actions



N/A





**EM Corporate QA Performance Metrics**  
10 CFR 830.122 & DOE O 414.1C

Criterion		Requirements
1	Program	1) Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work. 2) Establish management processes, including planning, scheduling, and providing resources for the work.
2	Personnel Training & Qualification	1) Train and qualify personnel to be capable of performing their assigned work. 2) Provide continuing training to personnel to maintain their job proficiency.
3	Quality Improvement	1) Establish and implement processes to detect and prevent quality problems. 2) Identify, control, and correct items, services, and processes that do not meet established requirements. 3) Identify the causes of problems and work to prevent recurrence as a part of correcting the problem. 4) Review item characteristics, process implementation, and other quality-related information to identify items, services, and processes needing improvement.
4	Documents and Records	1) Prepare, review, approve, issue, use, and revise documents to prescribe processes, specify requirements, or establish design. 2) Specify, prepare, review, approve, and maintain records.
5	Work Processes	1) Perform work consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means. 2) Identify and control items to ensure their proper use. 3) Maintain items to prevent their damage, loss, or deterioration. 4) Calibrate and maintain equipment used for process monitoring or data collection. 5) Verify or validate work before approval and implementation of the design.
6	Design	1) Design items and processes using sound engineering/scientific principles and appropriate standards. 2) Incorporate applicable requirements and design bases in design work and design changes. 3) Identify and control design interfaces. 4) Verify or validate the adequacy of design products using individuals or groups other than those who performed the work.
7	Procurement	1) Procure items and services that meet established requirements and perform as specified. 2) Evaluate and select prospective suppliers on the basis of specified criteria. 3) Establish and implement processes to ensure that approved suppliers continue to provide acceptable items and services.
8	Inspection & Acceptance Testing	1) Inspect and test specified items, services, and processes using established acceptance and performance criteria. 2) Calibrate and maintain equipment used for inspections and tests.
9	Management Assessment	Ensure managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives.
10	Independent Assessment	1) Plan and conduct independent assessments to measure item and service quality, to measure the adequacy of work performance, and to promote improvement. 2) Establish sufficient authority, and freedom from line management, for the group performing independent assessments. 3) Ensure persons who perform independent assessments are technically qualified and knowledgeable in the areas to be assessed.
	Suspect/Counterfeit Items	An S/CI prevention process must be developed and implemented as a part of the organization's quality assurance program (QAP) and commensurate with the facility/activity hazards and mission impact. The QAP must be applied to identifying and analyzing S/CI's, removing them, and preventing S/CI's from being supplied to DOE/NNSA and its contractors.
	Software Quality Assurance	Safety software quality requirements are necessary to ensure that DOE/NNSA safety software in nuclear facilities performs its intended specific safety functions in relation to structures, systems, or components (SSCs) and that the classification, design, and analysis associated with nuclear facility operations is correct
	Corrective Action	To prescribe process requirements and responsibilities for DOE line managers to perform corrective actions that effectively resolve safety issues.

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period:   FY09  

MANAGEMENT/ PROGRAM [10 CFR 830 Criterion #1]				SCORE
ASME NQA-1, 2004	Supported ISM Core Functions/Guiding Principles			
1. Organization 2. Quality Assurance Program	Define Work Identify/Analyze Hazards Develop/Implement Controls	Perform Work within Controls Feedback/Continuous Improvement Line Management Responsibility	Clear Roles and Responsibilities Competence Commensurate with Responsibilities	
Lines of Inquiry	Response			
	Basis		Supporting Documents	Score
The quality management system (QMS) defines and documents the established organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work including overall expectations for effective implementation of the quality assurance program. A				
The QMS describes a quality assurance organization that has sufficient resources and qualifications to perform its functions. B				
The QMS defines a process for grading the application of requirements and this process adequately addresses hazards and mission. C				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period:   FY09  

MANAGEMENT/ PERSONNEL TRAINING AND QUALIFICATION [10 CFR 830 Criterion #2]				SCORE
ASME NQA-1, 2004	Supported ISM Core Functions/Guiding Principles			
2. Quality Assurance Program	Define Work Identify/Analyze Hazards Develop/Implement Controls	Perform Work within Controls Feedback/Continuous Improvement Line Management Responsibility	Clear Roles and Responsibilities Competence Commensurate with Responsibilities	
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
A The methodology is well described for establishing requirements to indoctrinate, train, qualify and maintain proficiency of personnel performing or managing activities affecting quality.	A.			
B Adequate resources have been identified to support the selection, training, and qualification of personnel conducting work.				
C Requirements are defined and implemented for the qualification and/or certification of personnel in the various functional areas (e.g., audit personnel, subject matter experts, inspection and test personnel, welders, etc.).				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

MANAGEMENT/ QUALITY IMPROVEMENT [10 CFR 830 Criterion #3]				SCORE
ASME NQA-1, 2004		Supported ISM Core Functions/Guiding Principles		
2. Quality Assurance Program 15. Control of Nonconforming Items	16. Corrective Action	Feedback/Continuous Improvement Operations Authorization		
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
A The organization has established, implemented, and documented processes to detect and prevent quality problems such as conditions adverse to quality and nonconforming items.	A.			
B The QMS describes methods for addressing cause, extent, and remedial and preventative corrective actions for conditions adverse to quality to prevent recurrence.				
C A process is identified to review process implementation, item characteristics, and other quality-related information to effect continuous improvement to the QMP.				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

MANAGEMENT/ QUALITY IMPROVEMENT [10 CFR 830 Criterion #3] (cont)			
Lines of Inquiry	Response		
	Basis	Supporting Documents	Score
D Controls provide for identification, documentation, evaluation, notification to affected organizations, segregation when practical, and disposition of nonconforming items.	D.		
E Performance analysis system monitors the health of the quality improvement element and provides feedback to the affected and related organizational entities.			
F A nonconformance and corrective action tracking and trending program is in place and effective.			

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period








Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

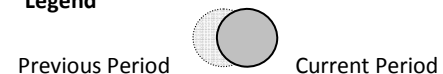
Period:   FY09  

MANAGEMENT/ DOCUMENTS AND RECORDS [10 CFR 830 Criterion #4]				SCORE
<b>ASME NQA-1, 2004</b>		<b>Supported ISM Core Functions/Guiding Principles</b>		
5. Instructions, Procedures, and Drawings		Define Work	Perform Work within Controls	
6. Document Control		Identify/Analyze Hazards	Balanced Priorities	
17. Quality Assurance Records		Develop/Implement Controls	Hazard Controls Tailored to Work Operations Authorization	
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
Functions and activities affecting quality and services are effectively described and performed in approved, documented, and controlled instructions, procedures, or drawings that include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished.	A.			
Quality assurance records are traceable to associated items and completed work activities from applicable documents, such as design specifications, procurement documents, test procedures, and operational procedures; properly identified, classified, and specified; authenticated, controlled, and maintained; and their final disposition is specified.				
Documents have been developed and effectively implemented that prescribe processes to oversee contractors and suppliers.				
The QMS describes how procedures are prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design.				

**Performance Score**







**Legend**



**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period:   FY09  

PERFORMANCE/ WORK PROCESSES [10 CFR 830 Criterion #5]				SCORE
<b>ASME NQA-1, 2004</b>		<b>Supported ISM Core Functions/Guiding Principles</b>		
5. Instructions, Procedures, & Drawings	13. Handling, Storage, & Shipping	Define Work	Balanced Priorities	
8. Identification & Control of Items	14. Inspection, Test, & Operating Status	Identify/Analyze Hazards	Identification of Safety Standards	
9. Control of Special Processes	Subpart 2.7 SQA	Develop/Implement Controls	Hazard Controls Tailored to Work	
12. Control of Measuring & Test Equipment		Perform Work within Controls	Operations Authorization	
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
A Core functions and guiding principles of the DOE Integrated Safety Management System are addressed consistent with DOE O 450.1, <i>Environmental Protection Program</i> , DOE P 450.4, <i>Safety Management System Policy</i> , and applicable chapters in DOE O 5480.19, <i>Conduct of Operations Requirements for DOE Facilities</i> , such that work is performed consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements	A.			
B The QMS provides methods to identify and control items including S/CI, to ensure their proper use consistent with DOE G 414.1-3 and it addresses suspect counterfeit items.				
C The method to maintain items to prevent their damage, loss, or deterioration is adequately described. This method addresses the requirements (e.g., DOE O 433.1, <i>Maintenance Management Program for DOE Nuclear Facilities</i> ).				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period



**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

PERFORMANCE/ WORK PROCESSES [10 CFR 830 Criterion #5] (cont)			
Lines of Inquiry	Response		
	Basis	Supporting Documents	Score
D Special processes that control or verify quality, such as those used in welding, heat treating, and nondestructive examination, are performed by qualified personnel using approved procedures or instructions compliant with the requirements of applicable codes and standards, including acceptance criteria.	D.		
E Tools, gauges, instruments, and other measuring and test equipment used for activities affecting quality are controlled and calibrated at specific periods, adjusted and maintained to required accuracy limits.			
F Status of inspection and test activities is identified either on the items or in documents traceable to the items where it is necessary to ensure that required inspections and tests are performed and to ensure that items which have not passed the required inspections and tests are not inadvertently installed, used, or operated.			

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period







Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period:   FY09  

PERFORMANCE/ DESIGN [10 CFR 830 Criterion #6]				SCORE
ASME NQA-1, 2004	Supported ISM Core Functions/Guiding Principles			
3. Design Control Subpart 2.7 SQA	Define Work Identify/Analyze Hazards Develop/Implement Controls	Perform Work within Controls Balanced Priorities Identification of Safety Standards	Hazard Controls Tailored to Work Operations Authorization	
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
A The QMS describes a process for design verification and/or validation for design products including software related to safety systems, before approval and implementation of the design. The process requires the use of individuals or groups other than those who performed the work.	A.			
B Design items and processes use sound engineering/scientific principles and appropriate Standards and Orders (i.e., DOE O 420.1B, <i>Facility Safety</i> ). The process addresses change control (changes to design inputs, final designs, field changes and temporary and permanent modifications to operating facilities).				
C Design interfaces are identified and controlled, within the design authority and externally with customers and suppliers, including subcontractors.				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period






Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

PERFORMANCE/ DESIGN [10 CFR 830 Criterion #6] (cont)				SCORE
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
<p>Design verification evaluations are tailored as a function of importance to safety,</p> <p>D complexity of the design, degree of standardization, state-of-the-art, and similarity with previously proved designs.</p>	D.			
<p>Procedures implementing configuration management requirements are established and documented at the earliest practical time prior to facility operation, including</p> <p>E authority and responsibilities of the organizations whose functions affect the configuration of the facility, such as operations, design, maintenance, construction, licensing, and procurement.</p>				
<p>Software design requirements are identified and documented and their selection reviewed and approved (operating system,</p> <p>F function, interfaces, performance requirements, installation considerations, design inputs, and any design constraints of the computer program).</p>				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

PERFORMANCE/ PROCUREMENT [10 CFR 830 Criterion #7]				SCORE
ASME NQA-1, 2004		Supported ISM Core Functions/Guiding Principles		
4. Procurement Document Control	Define Work	Perform Work within Controls	Hazard Controls Tailored to Work	
7. Control of Purchased Items and Services Subpart 2.7 SQA	Identify/Analyze Hazards Develop/Implement Controls	Balanced Priorities Identification of Safety Standards	Operations Authorization	
Lines of Inquiry	Response			
	Basis		Supporting Documents	Score
A The requirements for the procurement of items and services are established. The requirements include performance and quality specifications provided by the design authority and quality organization. The requirements ensure that procured items and services will meet established requirements and perform as expected.	A.			
B The system to evaluate and select prospective suppliers based on specified criteria performs satisfactorily.				
C Processes are established and implemented to ensure that approved suppliers continue to provide acceptable items and services. Application is graded to ensure safety-related items and mission critical items are subject to more rigorous methods (e.g., inspection and testing at the manufacturer and upon receipt).				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period







Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

PERFORMANCE /INSPECTION AND ACCEPTANCE TESTING [10 CFR 830 Criterion #8]				SCORE
ASME NQA-1, 2004		Supported ISM Core Functions/Guiding Principles		
8. Identification & Control of Items 10. Inspection 11. Test Control	12. Control of Measuring and Test Equipment Subpart 2.7 SQA	Feedback/Continuous Improvement Operations Authorization		
Lines of Inquiry	Response			Score
	Basis		Supporting Documents	
A  Inspections and tests are specified for items, services, and processes. Acceptance and performance criteria are established and used.	A.			
B  The system for documenting the results of inspections and tests performs satisfactorily.				
C  Inspection and test equipment is controlled by a process to ensure it is calibrated and maintained.				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

ASSESSMENT/ MANAGEMENT ASSESSMENT [10 CFR 830 Criterion #9]			SCORE
ASME NQA-1, 2004	Supported ISM Core Functions/Guiding Principles		
2. Quality Assurance Program 18. Audits	Feedback/Continuous Improvement Operations Authorization		
Lines of Inquiry	Response		
	Basis	Supporting Documents	Score
A The QMS describes how managers, at all levels, assess their management processes.	A.		
B The QMS provide for the identification and correction of problems that hinder the organization from achieving its objectives.			
C Managers take responsibility for, and directly participate in, the assessments.			

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

ASSESSMENT/ INDEPENDENT ASSESSMENT [10 CFR 830 Criterion #10]				SCORE
ASME NQA-1, 2004		Supported ISM Core Functions/Guiding Principles		
1. Organization 2. Quality Assurance Program 10. Inspection 11. Test Control		15. Control of Nonconforming Items 16. Corrective Action 18. Audits Feedback/Continuous Improvement Operations Authorization		
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
A Independent assessments (e.g., audits) are planned and conducted to measure item and service quality, to measure the adequacy of work performance, and to promote improvement.	A.			
B The organization responds on assessments in a manner that results in continuous improvement.				
C The group performing independent assessments has sufficient authority and freedom from line management (i.e., not directly responsible for the work being assessed) and the persons who perform independent assessments are technically qualified and knowledgeable in the areas to be assessed.				
D Management of the audited organization or activity investigate adverse audit findings, schedule corrective action, including measures to prevent recurrence of significant conditions adverse to quality, and notify the appropriate organization in writing of action taken or planned.				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period







Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period:   FY09  

SUSPECT / COUNTERFEIT ITEMS (S/CI) [DOE O 414.1C, Section 4 & Attachment 3]			SCORE
ASME NQA-1, 2004			
7. Control of Purchased Items & Services 8. Identification & Control of Items	10. Inspection 15. Control of Nonconforming Items		
Lines of Inquiry	Response		
	Basis	Supporting Documents	Score
A S/CI program is in place to adequately identify problems, control non conforming items and prevent their use.			
B Oversight of the S/CI process is performed to ensure it is functioning adequately.			
C Corrective actions for S/CI identified issues are adequately performed and tracked to ensure closure and provide lessons learned.			

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period







Current Period



**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period:   FY09  

SAFETY SOFTWARE QUALITY (SQA) REQUIREMENTS [DOE O 414.1C, Section 5 & Attachment 5]				SCORE
ASME NQA-1, 2004				
3. Design 5. Instructions, Procedures and Drawings		7. Control of Purchased Items & Services 11. Test Control		
Lines of Inquiry	Response			Score
	Basis		Supporting Documents	
Safety software quality assurance A requirements are adequately incorporated into a formal QA program.				
Safety software utilized by contractor has B DOE software quality assurance requirements applied.				
Management and/or Independent C assessments performed, specifically address safety software quality requirements				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate QA Performance Metrics**  
Quality Program Criteria

Site: \_\_\_\_\_

Period: FY09

CORRECTIVE ACTION (CA) MANAGEMENT PROGRAM [DOE O 414.1C, Attachment 4]				SCORE
ASME NQA-1, 2004				
16. Corrective Action				
Lines of Inquiry	Response			
	Basis	Supporting Documents	Score	
A  A corrective action management program is in place, personnel are trained on its usage and is functional for tracking issues and quality problems.				
B  An organization or person is identified and empowered to be responsible for managing and tracking corrective action.				
C  Issues and associated corrective action are adequately communicated to others for operational awareness and lessons learned outside the affected organization.				

**Performance Score**



Excellent



Good



Investigate



Define Actions



N/A

**Legend**

Previous Period



Current Period

**EM Corporate Performance Metrics**  
Quality Program Criteria

**Instructions for EM Corporate Performance Metrics**

**Header**

- 1) Site: construction project, operating project, or contractor QA program being evaluated
- 2) Period for which the evaluation is being performed [FY 2009]

**Page 1**

Page 1 provides a summary roll-up of the scoring completed for each of the 10 CFR 830 criteria and supplementals of DOE O 414.1C shown on pages 3-18.

CD (Critical Decision)

Identifies which of the 10 criteria are to be evaluated, based on the execution phase of the project (e.g., CD 1, 2, 3 or 4.)

All criteria are to be evaluated for non-project specific, site contractor program evaluations.

User should enter the performance color for the Previous Period (if available) and Current Period. The color here will be based on the "Criterion Score" colors on pages 3-11.

**Page 2**

Lists each of the 10 criteria and 3 supplemental requirements contained in the Code of Federal Regulations, Title 10 Part 830.122 (10 CFR 830.122), Subpart A – "Quality Assurance Requirements" under Part 830 – "Nuclear Safety Management" and DOE O 414.1C, "*Quality Assurance*"

**Pages 3 – 18**

Top (shown in blue) of the page identifies each of the 10 criteria contained in 10 CFR 830.122. These criteria are also identified in DOE O 414.1C "*Quality Assurance*", along with 3 supplemental sections that are included in the metrics.

This is followed by the 18 requirements of ASME-NQA-1, 2004 "*Quality Assurance Requirements for Nuclear Facility Applications*" and the supported Integrated Safety Management (ISM) core functions and guiding principles cross-walked to the 10 criteria of 10 CFR 830, as shown in the ISM System Description for the EM Program.

Criterion Score shown on the top right will be based on a numerical average of the element scores as discussed below

**EM Corporate Performance Metrics**  
Quality Program Criteria

**Pages 3 – 18 (cont)**

**Lines of Inquiry**


Lists the specific lines of inquiry that need to be addressed and scored under “Response”.

**Response**

A justification should be provided under **Basis** for each individual element (A, B, ...). Basis provided should be substantiated by other project/site reporting of QA program performance, corrective action management, non-conformance tracking, etc.... The Basis should provide an explanation of the process implemented to address the LOI, rationale for the process construct (graded approach) and discussion of how the current health compares to the previous period health when a change is identified.. Basis should provide an explanation of how the expectation is implemented (process description), what, if any, performance indicators are used to monitor health (performance), and assessment and problem reporting info (feedback) regarding health of the implementation of the process. [A sample level of detail expected is provided on the last page of the instructions]

Provide a listing of **Supporting Documents** that were used in providing Basis and Score.

Complete **Score** with a performance color for the Previous Period (if available) and the Current Period as indicated below.

Previous Period            Current Period

Previous Period is shown by covered circle lightly shaded and Current Period is full, brightly colored.





[The colors are changed by right clicking the individual circles and selecting “Format AutoShape”, “Lines and Colors” tab, “Fill” color and clicking OK.]

## **EM Corporate Performance Metrics**

### **Quality Program Criteria**

#### **Response Score (cont)**

A performance color key is provided below with equivalent numerical scoring “grade” for each element and guidance that may be used for determining the score color. This evaluation is somewhat subjective, a descriptive “basis” should be provided for the “score”.

Score Color	Number	Score guidance
 Excellent	4	Process, plans or procedures established to address criteria. Assessment evidence demonstrates that system in place is programmatically compliant and has been effectively implemented. Previously identified issues have been corrected and incorporated into the program (feedback and continuous improvement).
 Good	3	Process, plans or procedures established to address criteria. Assessment evidence demonstrates that system in place is programmatically compliant; however, implementation concerns require attention. Concerns have been addressed in the corrective action program but have not yet been resolved.
 Investigate	2	Process, plans or procedures established to address criteria; however, no assessment evidence is available to demonstrate compliance or process implementation, or evidence demonstrates a continuing legacy concern that has not been addressed.
 Define Actions	1	Process, plans or procedures are not established to address criteria. Assessment evidence shows that the process, plans or procedures are programmatically inadequate or process, plans or procedures are established to address criteria; however, significant quality issues (e.g. PAAA) were identified during the period.





## EM Corporate Performance Metrics

### Quality Program Criteria

**Criterion Score** (shown on top right of pages 3-18)

A Score performance color should then be entered for each of the 10 CFR 830 criteria and DOE O 414.1C supplementals.

The color shall be based on the average of the equivalent numerical values for the performance colors of each element of the criteria compared to the range provided below.

Average of Element Numbers	Summary Score Color
3.5 – 4.0	 Excellent
2.75 – 3.5	 Good
2.0 – 2.75	 Investigate
Below 2.0	 Define Actions

Example:

Score Item



= 3



= 2



= 2

Avg =  $(3+2+2)/3 = 2.33$

»»

Score Sum



**EM Corporate Performance Metrics**  
Quality Program Criteria

Sample level of detail

MANAGEMENT/ PROGRAM			10 CFR 830 Criterion #1	SCORE
ASME NQA-1, 2004	Supported ISM Guiding Principles			
1. Organization	Define Work	Perform Work within Controls	Clear Roles and Responsibilities	
2. Quality Assurance Program	Identify/Analyze Hazards	Feedback/Continuous Improvement	Competence Commensurate with Responsibilities	
	Develop/Implement Controls	Line Management Responsibility		
Lines of Inquiry	Response			
	Basis		Supporting Documents	Score
The quality management system (QMS) defines and documents the established organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work including overall expectations for effective implementation of the quality assurance program.	B. The QAPD directly addresses organizational structure for WCH and functional responsibilities for QA program specific implementation. The QAPD defers to the Project Management Plan for general functional responsibilities, levels of authority, and interfaces. The QMS has gone through a recent improvement campaign to better align with NQA-1 consensus standard requirements addressing previously noted weaknesses.		ISMS Phase II verification (November 2007) QA verification of implementing procedures (July 2008).	
The QMS describes a quality assurance organization that has sufficient resources and qualifications to perform its functions.	C. The QAPD identifies the QA organization and describes the roles and responsibilities of the QA organization. Specific training requirements for QA Inspection and assessment personnel are addressed.			
	D. The QAPD describes the grading process and how it is implemented at WCH. Recent revision to the QAPD clarified the strategy on how the graded approach is developed, implemented, and verified addressing previous weakness. Due to the closure contract nature of WCH, a tiered or multi-level approach has not been developed at XYZ (no QA levels). However, key processes that benefit from grading such as training, work control, procurement, and assessments have been developed reflecting a varied approach based on risk and consequences to ensure hazards associated with work activities are appropriately addressed.			
The QMS defines a process for grading the application of requirements and this process adequately address hazards and mission.	Implementation of organization and graded approach is deemed effective based on completion of the ISMS Phase II verification (November 2007) and QA verification of implementing procedures (July 2008). Key improvement initiatives for 2007 was a complete re-write of the QAPD to better incorporate NQA1-2000 into the QAPD and to develop an implementation matrix that shows all procedures credited for implementing QAPD requirements. Overall excellent grade applied due to the combination of Senior management support and buy-in to the QA program, sufficient staffing in QA and the Projects to ensure in process quality controls and oversight is performed, and the recent re-write of the program to true up with DOE 414.1C and NQA-1.			